

WHAT IS CLAIMED IS:

1. An unbalance disc detection apparatus comprising:
a photo detector which receives, at its photo reception
region, reflection light from a disc on which a laser light is
5 irradiated;

a push-pull signal calculation section which obtains
change of a light quantity detected by the photo reception region
as a push-pull signal;

a tracking drive control section which turns on and off
10 a tracking drive mechanism for tracing, in a radial direction
of the disc, an objective lens for projecting the reflection
light of the laser light on the photo reception region; and
an unbalance disc discriminating section which
discriminates whether or not a level of the push-pull signal
15 exceeds a threshold value in an off-state of the tracking drive
mechanism to discriminate an unbalance disc.

2. The unbalance disc detection apparatus according
to claim 1, wherein the unbalance disc is discriminated with
reference to a threshold value which is changed in accordance
20 with the measurement rotation speed.

3. The unbalance disc detection apparatus according
to claim 1, wherein the disc is driven by a motor.

4. The unbalance disc detection apparatus according
to claim 1, wherein the threshold value is set in correspondence
25 to a predetermined measurement rotation speed.

5. An unbalance disc detection method comprising:
irradiating a laser light on the disc;

receiving the laser light reflected from the disc by a
photo detector having a photo reception region;

5 obtaining change of a light quantity detected by the photo
reception region as a push-pull signal in an off-state of a
tracking drive mechanism for tracing, in a radial direction of
the disc, an objective lens for projecting the reflection light
of the laser light on the photo reception region; and

10 discriminating whether or not a level of the push-pull
signal exceeds a threshold value to discriminate an unbalance
disc.

6. The unbalance disc detection method according to
claim 5, wherein when a level of the push-pull signal does not
15 exceed the threshold value, a measurement rotation speed is
updated and the unbalance disc is discriminated with reference
to a threshold value set according to the updated measurement
rotation speed.

7. The unbalance disc detection method according to
20 claim 4, further comprising driving the disc by a motor.

8. The unbalance disc detection method according to
claim 4, wherein the threshold value is set in correspondence
to a predetermined measurement rotation speed.